



BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

KML Windows, Inc.
23 Buchanan Court
London, Ontario, Canada N5Z 4P9

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Aluminum Clad Wood Operable Casement Window-N.I.

APPROVAL DOCUMENT: Drawing No.1227B, titled "Aluminum Clad Wood Operable Casement Window Non-Impact Windows", sheets 1 through 10 of 10, prepared by W.W. Schaefer Engineering & Consulting, P.A., dated 5/13/03, signed and sealed by Warren Schaefer, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: None

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA # 00-1030.05 and, consists of this page 1 as well as approval document mentioned above. The submitted documentation was reviewed by **Theodore Berman, P.E.**



NOA No 03-0625.09
Expiration Date: September 27, 2004
Approval Date: October 16, 2003
Page 1

KML Windows, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **1227B**, titled "Aluminum Clad Wood Operable Casement Window Non-Impact Windows", sheets 1 through 10 of 10, prepared by W.W. Schaefer Engineering & Consulting, P.A., dated 5/13/03, signed and sealed by Warren Schaefer, P.E.

B. TESTS

Submitted under NOA# 00-1030.05

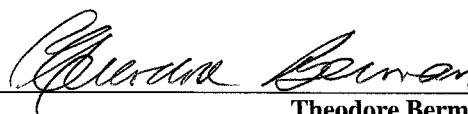
1. Test reports on
 - 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411 3.2.1 and TAS 202-94along with installation diagram of aluminum clad wood operable casement windows of different shapes, prepared by Intertek Testing Services NA Inc., Test Report No. **J99022770-231-01**, dated October 9, 2000, signed and sealed by Douglas Keith Tucker, P.E
2. Test reports on
 - 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94along with installation diagram of aluminum clad wood operable casement windows of different shapes, prepared by Intertek Testing Services NA Inc., Test Report No. **J99022770-231-02**, dated October 10, 2000, signed and sealed by Douglas Keith Tucker, P.E

C. CALCULATIONS

1. Anchor Calculations, and ASTM-E1300-98 Analysis dated 5/22/03, prepared by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren Schaefer, P.E.

Submitted under NOA# 00-1030.05

2. Anchor Calculations, prepared by W. W. Schaefer Engineering & Consulting, P.A., dated 9/25/00, signed and sealed by Warren W. Schaefer, PE.



Theodore Berman, P.E.
Deputy Director, Product Control Division
NOA No 03-0625.09

Expiration Date: September 27, 2004
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KML Windows, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

D. MATERIAL CERTIFICATIONS

Submitted under NOA# 00-1030.05

1. Notice of Acceptance No. **00-0524.06** issued to Nebula Glass International Inc. for "Glasslam Safety-Plus Laminated Glass" dated 9/21/00, expiring on 9/9/03.
2. Notice of Acceptance No. **02-0828.16** issued to E.I. DuPont DeNemours for "Dupont Butacite ® PVB" dated 11/21/02, expiring on 12/11/05.

E. QUALITY ASSURANCE

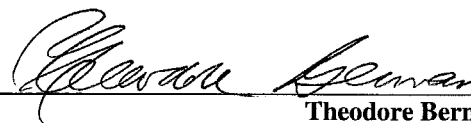
1. Miami-Dade County Building Code Compliance Office

F. STATEMENTS

1. None

F. OTHER

1. Notice of Acceptance No. **00-1030.05**, issued to KML Window, Inc., Aluminum Clad Wood Operable Casement Window, approved on 9/27/01 and expiring on 9/27/04.

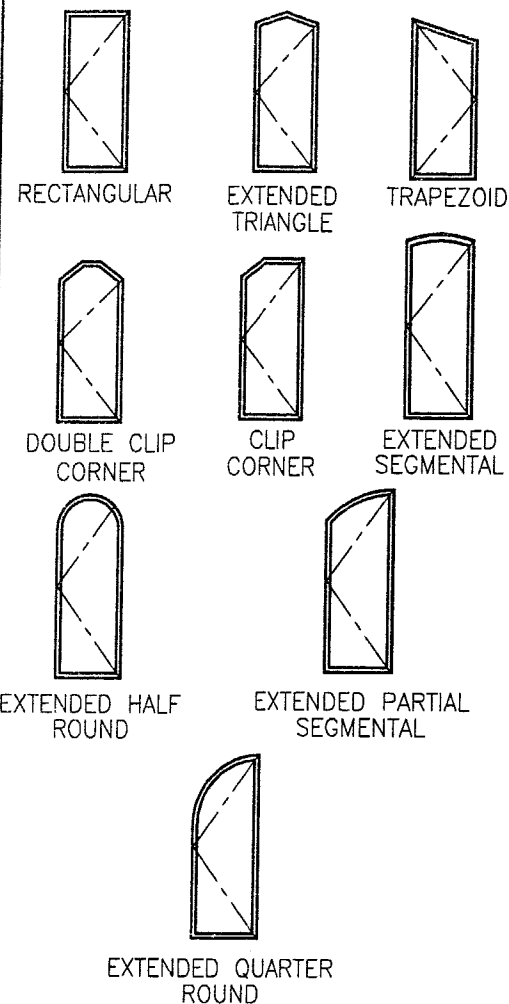


Theodore Berman, P.E.
Deputy Director, Product Control Division

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SHAPES CONSIDERED AS
PART OF THIS APPROVAL

LATCH & HINGE QUANTITY TABLE

WINDOW HEIGHT	NUMBER OF LATCH POINTS REQ'D	NUMBER OF HINGES REQ'D
36"	2	2
42"	3	2
48"	3	2
54"	3	3
60"	4	3
66"	4	3
73"	5	3
78"	5	3
84"	5	3

1. IF THE WINDOW HEIGHT FALLS BETWEEN HEIGHTS IN THIS TABLE, THE TALLER TABLE HEIGHT SHALL BE USED.
2. THE MINIMUM NUMBER OF LATCH POINTS OR HINGES USED MAY NOT BE LESS THAN 2 FOR WINDOWS SHORTER THAN 36".

GENERAL NOTES

1. THESE WINDOW SYSTEMS HAVE BEEN TESTED, ANALYZED AND APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN LOADS" TABLES.
2. BUCKING, OPENINGS & BUCKING FASTENERS MUST BE DESIGNED & INSTALLED TO WITHSTAND WIND LOADS AS DETERMINED FOR EA. APPLICATION.
3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & MAY NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS.
4. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS PROPOSED FOR WATER, AIR & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH FLORIDA BUILDING CODE PROTOCOLS TAS 202 FOR NON-IMPACT WINDOWS.
5. ALL JAMB TO BUCKING SHEAR FASTENERS MUST PENETRATE BUCK A MINIMUM OF 1 1/4". IF PENETRATION IS LESS THAN 1 1/4" THEN SCREW LENGTH SHALL INCREASE AS REQUIRED.
6. THESE WINDOW SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
7. THIS PRODUCT HAS BEEN TESTED IN ACCORDANCE WITH FLORIDA BUILDING CODE PROTOCOLS TAS-202.
8. FOR ALL NON-IMPACT WINDOWS, FLORIDA BUILDING CODE APPROVED SHUTTERS ARE REQUIRED.

NOTE: NUMBER OF LATCH POINTS & BUTT HINGES MAY VARY WITH UNIT HEIGHT PROVIDING END DISTANCES & SPACINGS DO NOT EXCEED THE MAXIMUMS SHOWN IN THESE ELEVATIONS.

NOTE: FOR COMBINATION OF UNITS. SEE SHEET 3 & MULLION DRAWING NO. 1003E UNDER SEPERATE APPROVAL

ALLOWABLE DESIGN LOADS

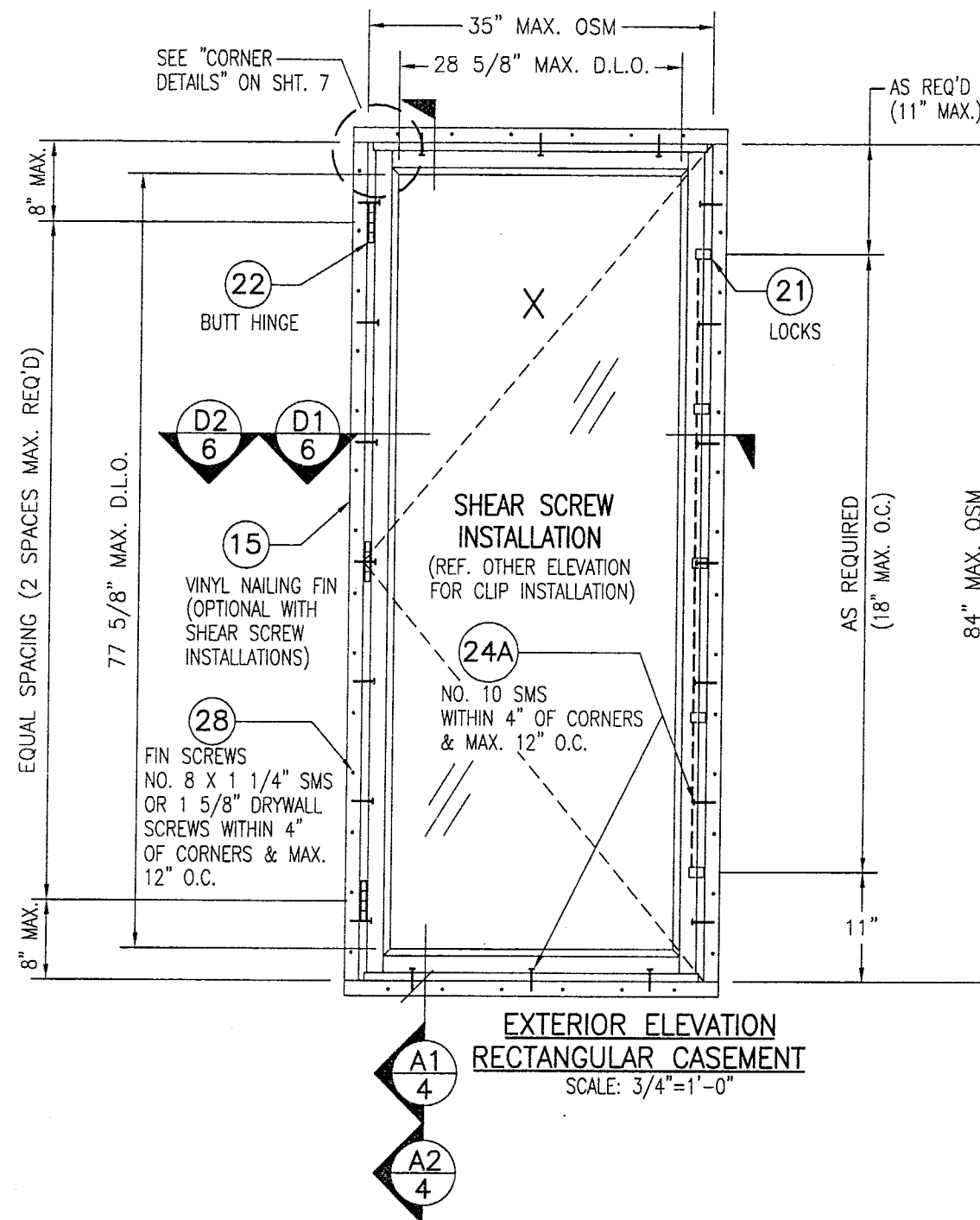
SEE "LOAD TABLE" ON SHEET 9

JAMB FASTENER MIN. EMBEDMENT INTO OPENING OR BUCK

NO. 10 SMS SCREWS INTO BUCK = 1 3/8"
1/4" TAPCON INTO CONCRETE/BLOCK = 1 1/4"

JAMB FASTENER MINIMUM EDGE DISTANCE AT OPENING OR BUCK

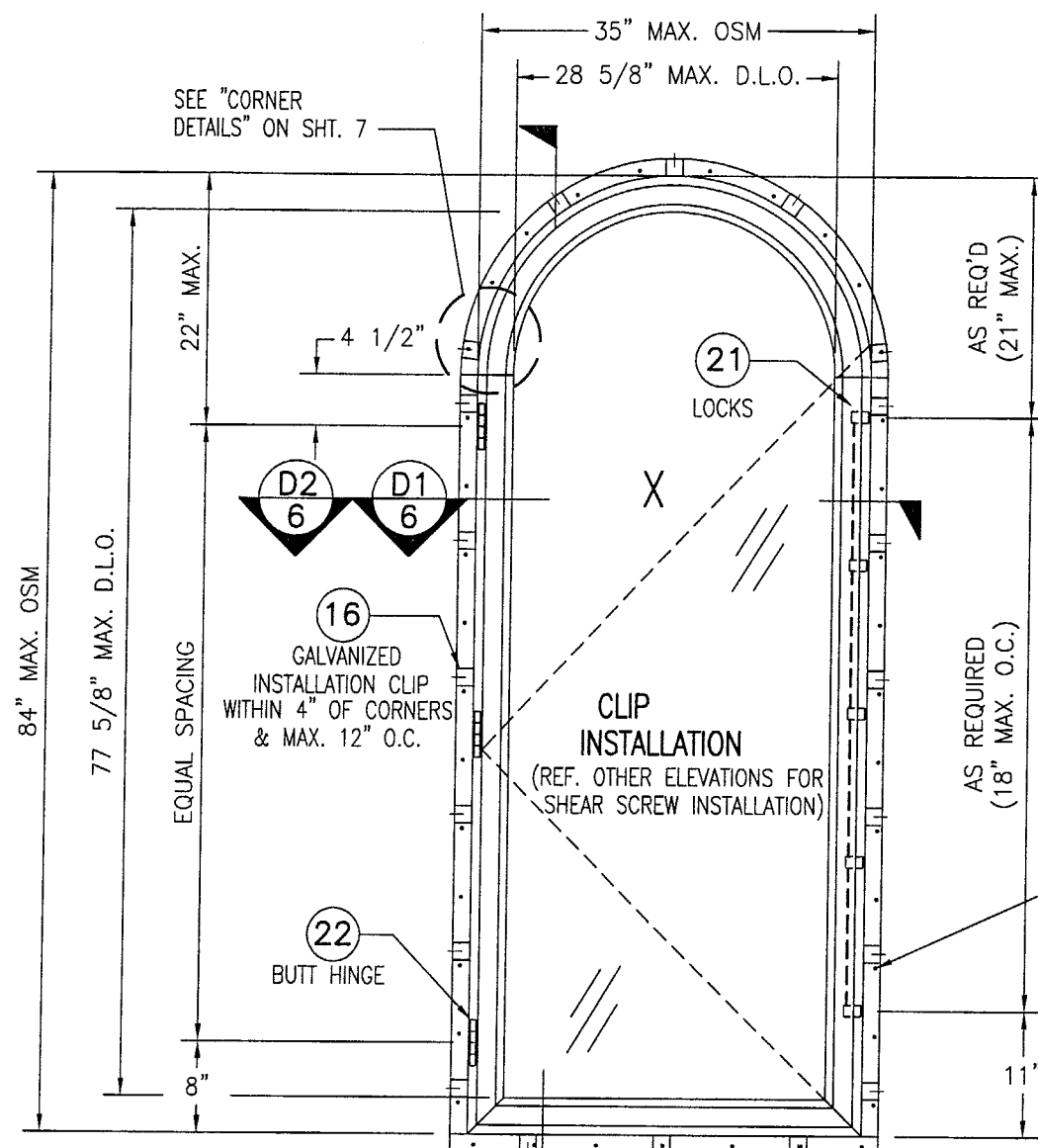
WOOD BUCK = 1"
CONCRETE/BLOCK = 2"



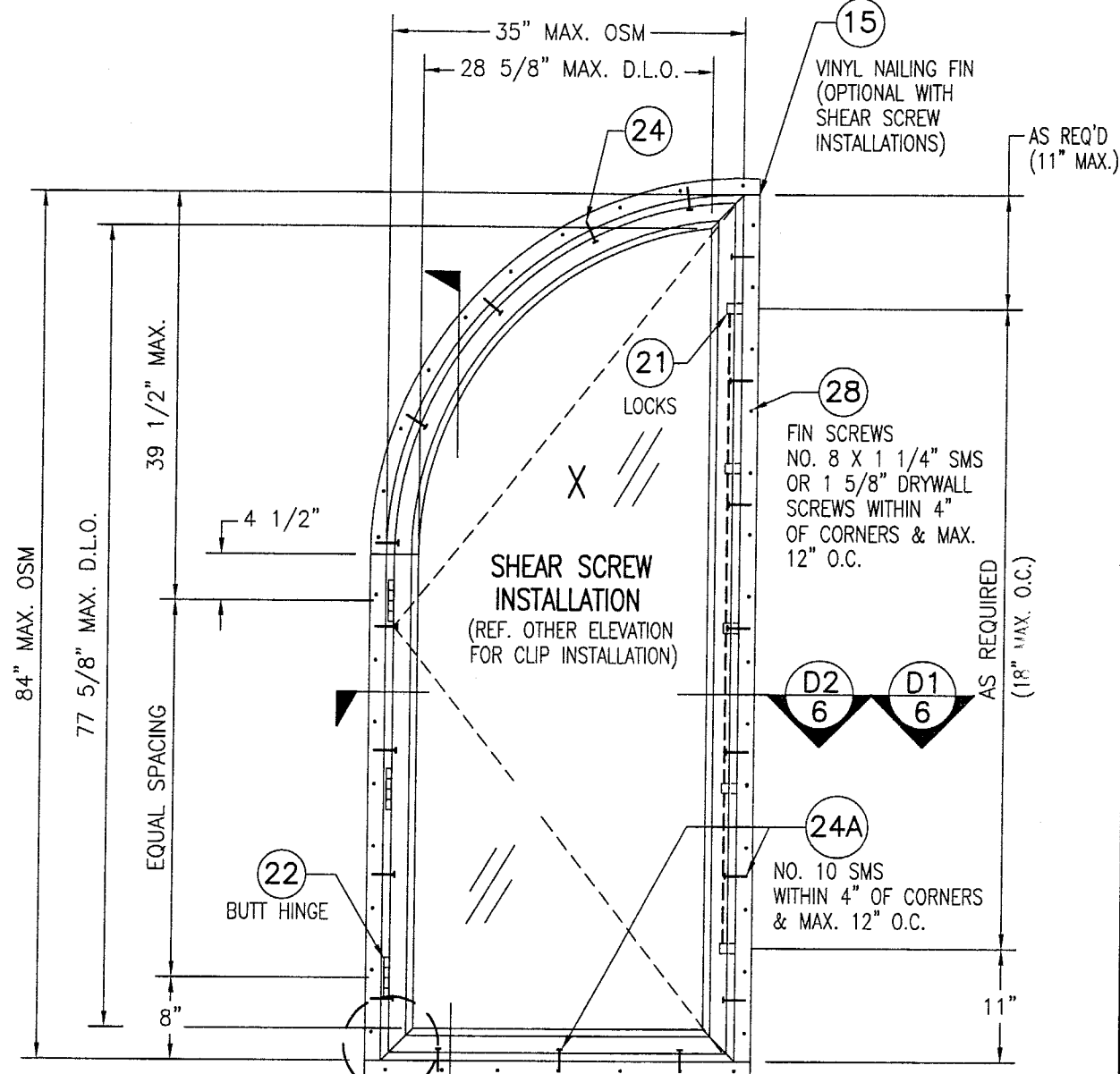
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 03-0625.09
Expiration Date 09/23/04

By *Warren W. Schaefer*
Miami Dade Product Control
Division

DRAWN BY: K.P.S.		CHECKED BY: W.W.S.	
PLOT: 1=16		DATE: 05/13/03	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE ALUMINUM CLAD WOOD OPERABLE CASEMENT NON-IMPACT WINDOWS			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903		MANUFACTURER KML WINDOWS, INC. 23 BUCHANAN COURT LONDON, ONTARIO, CANADA N5Z4P9 (519) 681-7012	
CERTIFICATION JUN 18 2003		P.E. WARREN W. SCHAEFER P.E. NO. 44155	
DRAWING NO. 1227B		REV.	
SHEET NO. 1 OF 10			



**EXTERIOR ELEVATION
HALF ROUND CASEMENT**
SCALE: 3/4"=1'-0"



**EXTERIOR ELEVATION
QUARTER ROUND CASEMENT**
SCALE: 3/4"=1'-0"

NOTE: FOR COMBINATION OF
UNITS. SEE SHEET 3
& MULLION DRAWING
NO. 1003E UNDER
SEPERATE APPROVAL

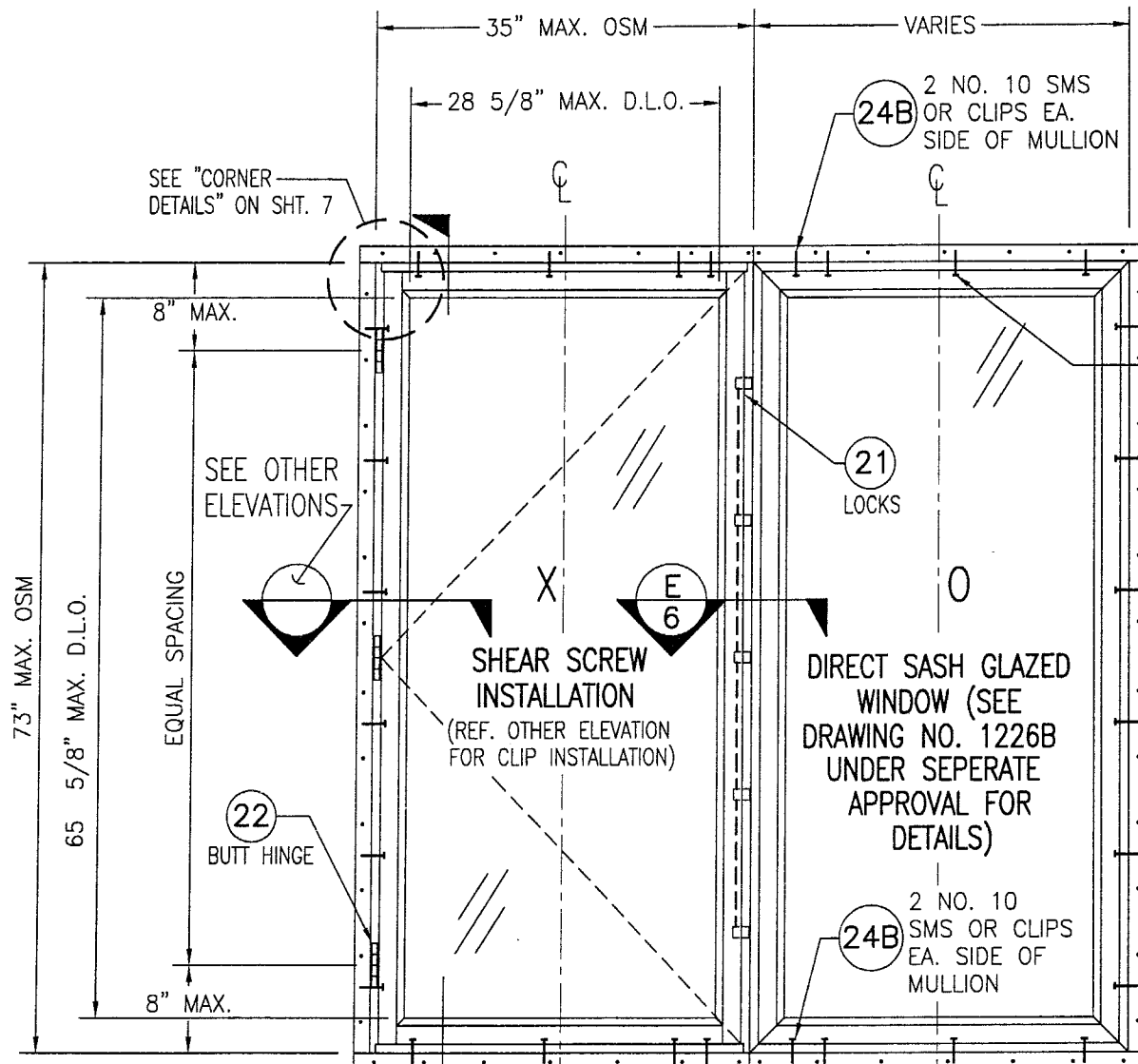
NOTE: NUMBER OF LATCH POINTS
& BUTT HINGES MAY VARY WITH UNIT HEIGHT
PROVIDING END DISTANCES & SPACINGS DO
NOT EXCEED THE MAXIMUMS SHOWN IN THESE
ELEVATIONS.

FOR JAMB FASTENER EMBED & EDGE DISTANCE
REQUIREMENTS, SEE SHEET 1

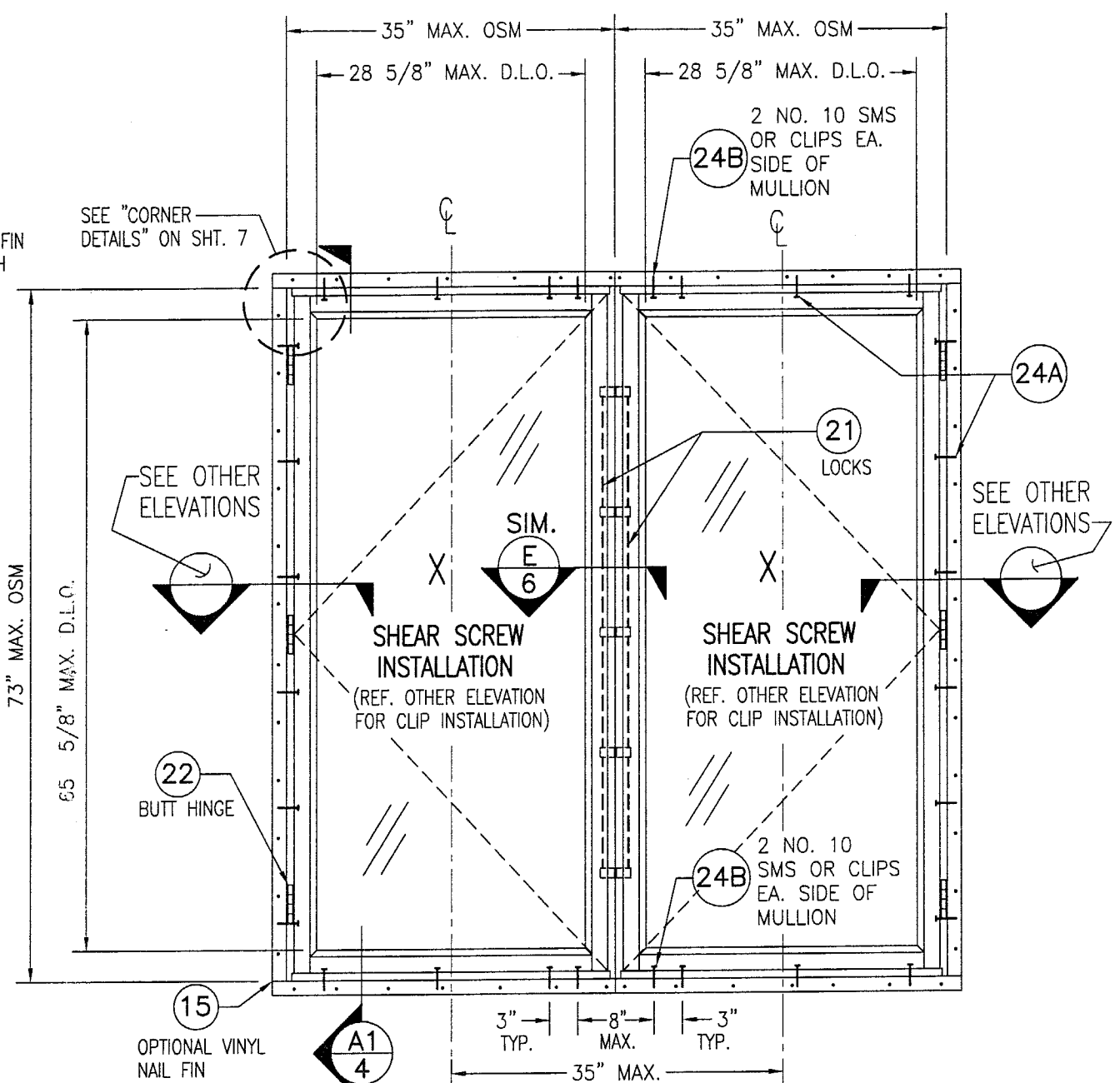
ALLOWABLE DESIGN LOADS
SEE "LOAD TABLE" ON SHEET 9

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 03-0625.09
Expiration Date 09/23/04
By *Richard Beaman*
Miami Dade Product Control
Division

DRAWN BY: K.P.S.		CHECKED BY: W.W.S.	
PLOT: 1=16		DATE: 05/13/03	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE ALUMINUM CLAD WOOD OPERABLE CASEMENT NO.		FACT WINDOWS	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903		MANUFACTURER KML WINDOWS, INC. 23 BUCHANAN COURT LONDON, ONTARIO, CANADA N5Z4P9 (519) 681-7012	
CERTIFICATION JUN 18 2003		DRAWING NO. 1227B	
WARREN W. SCHAEFER, P.E. P.E. NO. 44135		REV. SHEET NO. 2 OF 10	



EXTERIOR ELEVATION
MULTIPLE OPERABLE/FIX CASEMENT
 (UP TO 4 WINDOWS MAY BE COMBINED IN ONE OPENING)
 SCALE: 3/4"=1'-0"
 (FOR WINDOW DETAILS & DIMENSIONS NOT SHOWN, SEE OTHER ELEVATIONS)



EXTERIOR ELEVATION
MULTIPLE OPERABLE CASEMENT
 (UP TO 4 WINDOWS MAY BE COMBINED IN ONE OPENING)
 SCALE: 3/4"=1'-0"
 (FOR WINDOW DETAILS & DIMENSIONS NOT SHOWN, SEE OTHER ELEVATIONS)

FOR JAMB FASTENER EMBED & EDGE DISTANCE REQUIREMENTS, SEE SHEET 1

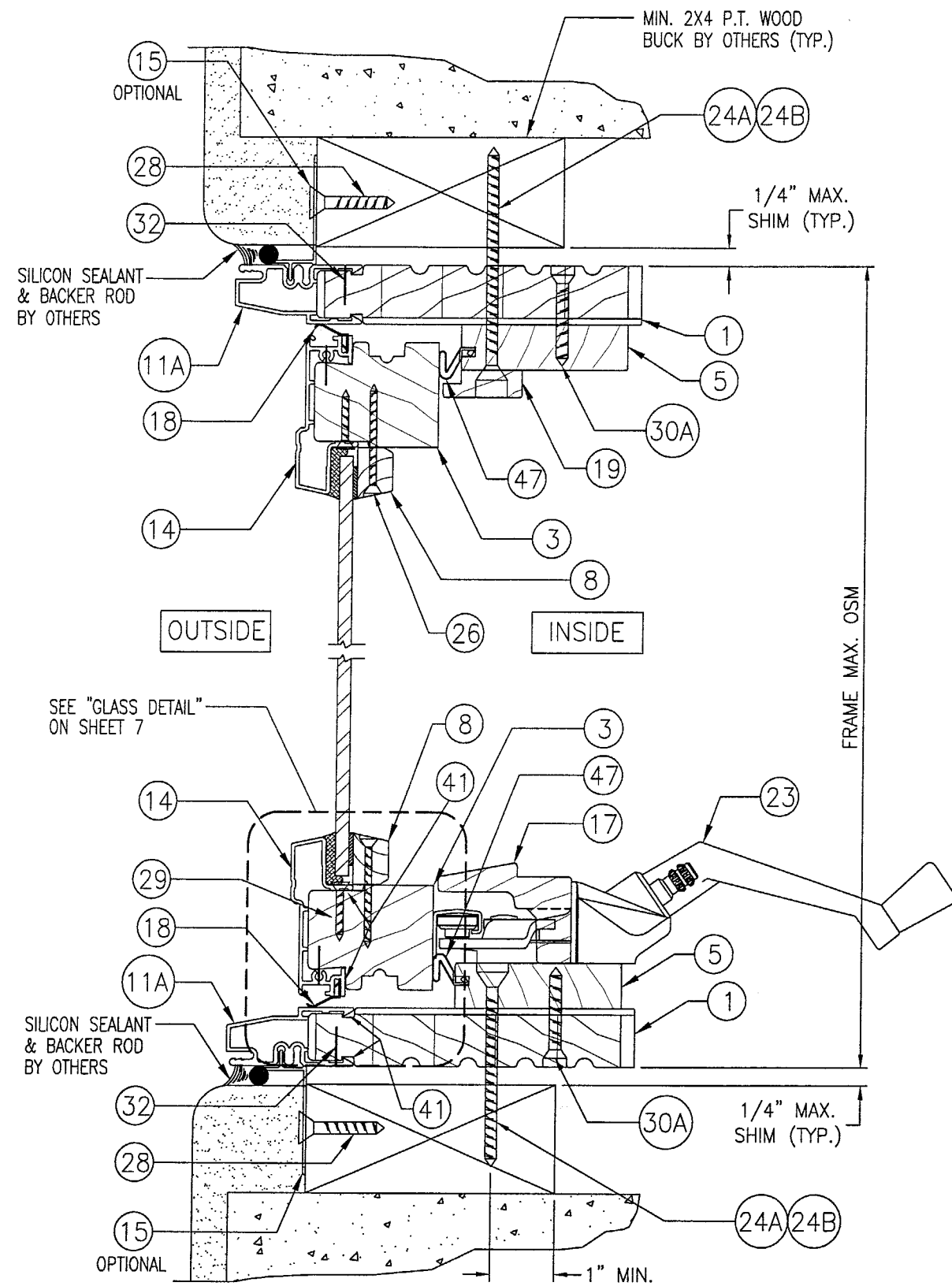
ALLOWABLE DESIGN LOADS (MULLED UNITS ONLY)
 ALLOWABLE DESIGN LOAD ON MULLED UNITS SHALL BE THE LESSER OF +65/-70 PSF OR AS CONTROLLED BY THE INDIVIDUAL WINDOW (SEE LOAD TABLE ON SHEET 9 FOR ALLOWABLE WINDOW LOADS).

NOTE: NUMBER OF LATCH POINTS & BUTT HINGES MAY VARY WITH UNIT HEIGHT PROVIDING END DISTANCES & SPACINGS DO NOT EXCEED THE MAXIMUMS SHOWN IN THESE ELEVATIONS.

NOTE: FOR COMBINATION OF UNITS. SEE MULLION DRAWING NO. 1003E UNDER SEPERATE APPROVAL

PRODUCT REVISED
 as complying with the Florida Building Code
 Acceptance No. 03-0625.09
 Expiration Date 09/23/04
 By *Cleodine Dorman*
 Miami Dade Product Control Division

DRAWN BY: K.P.S.		CHECKED BY: W.W.S.	
PLOT: 1=16		DATE: 05/13/03	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE ALUMINUM CLAD WOOD OPERABLE CASEMENT NON-IMPACT WINDOWS			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903		MANUFACTURER KML WINDOWS, INC. 23 BUCHANAN COURT LONDON, ONTARIO, CANADA N5Z4P9 (519) 681-7012	
CERTIFICATION JUN 18 2003 <i>Warren W. Schaefer</i> WARREN W. SCHAEFER, P.E. P.E. NO. 44135		DRAWING NO. 1227B SHEET NO. 3 OF 10	

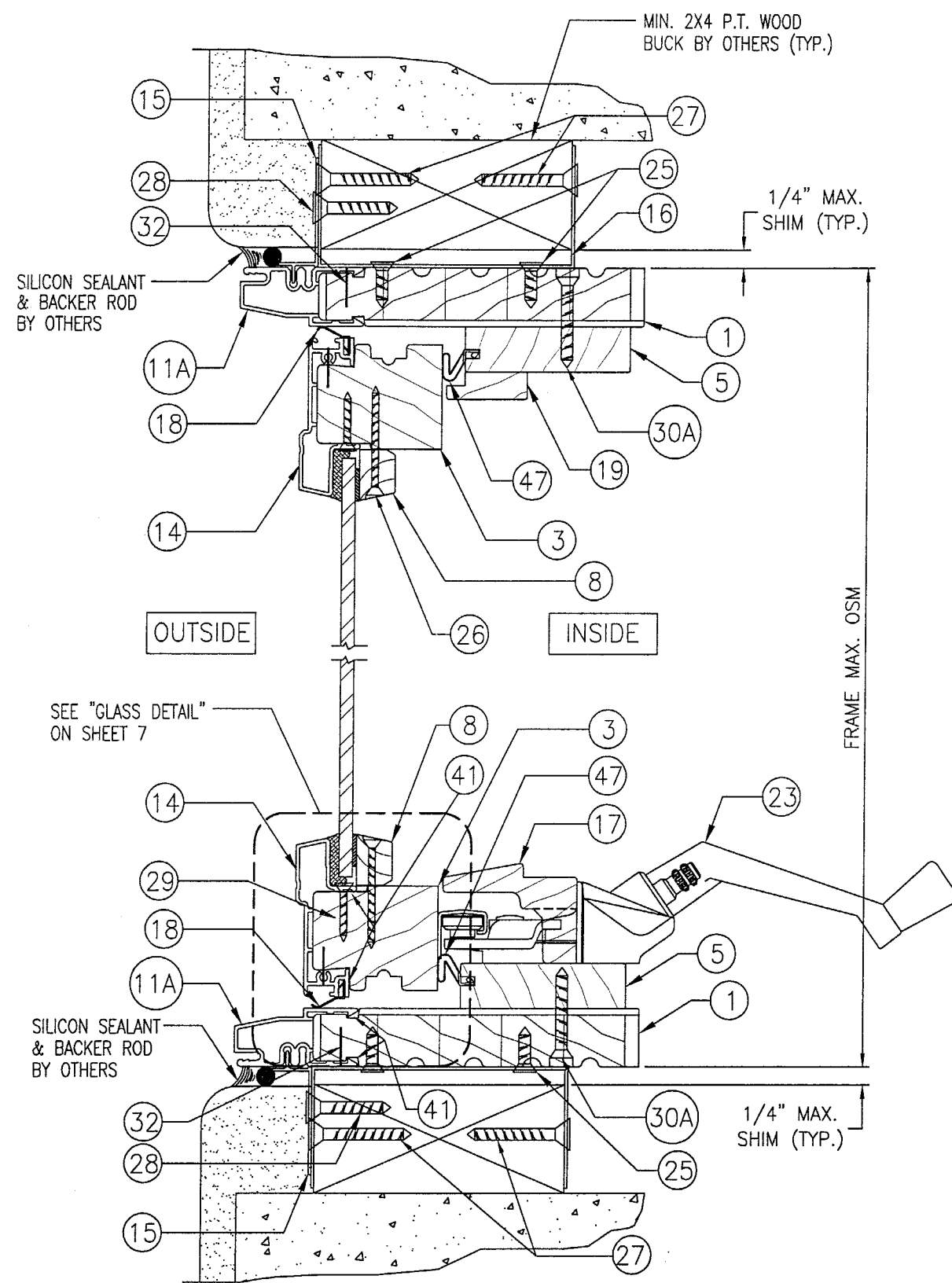


SECTION

SCALE: HALF FULL SIZE
SEE "OPTIONAL JAMB DETAIL" ON SHEET 7 FOR DIRECT MOUNT TO BLOCK OR CONCRETE.

SHEAR SCREW
INSTALLATION

A1
4



SECTION

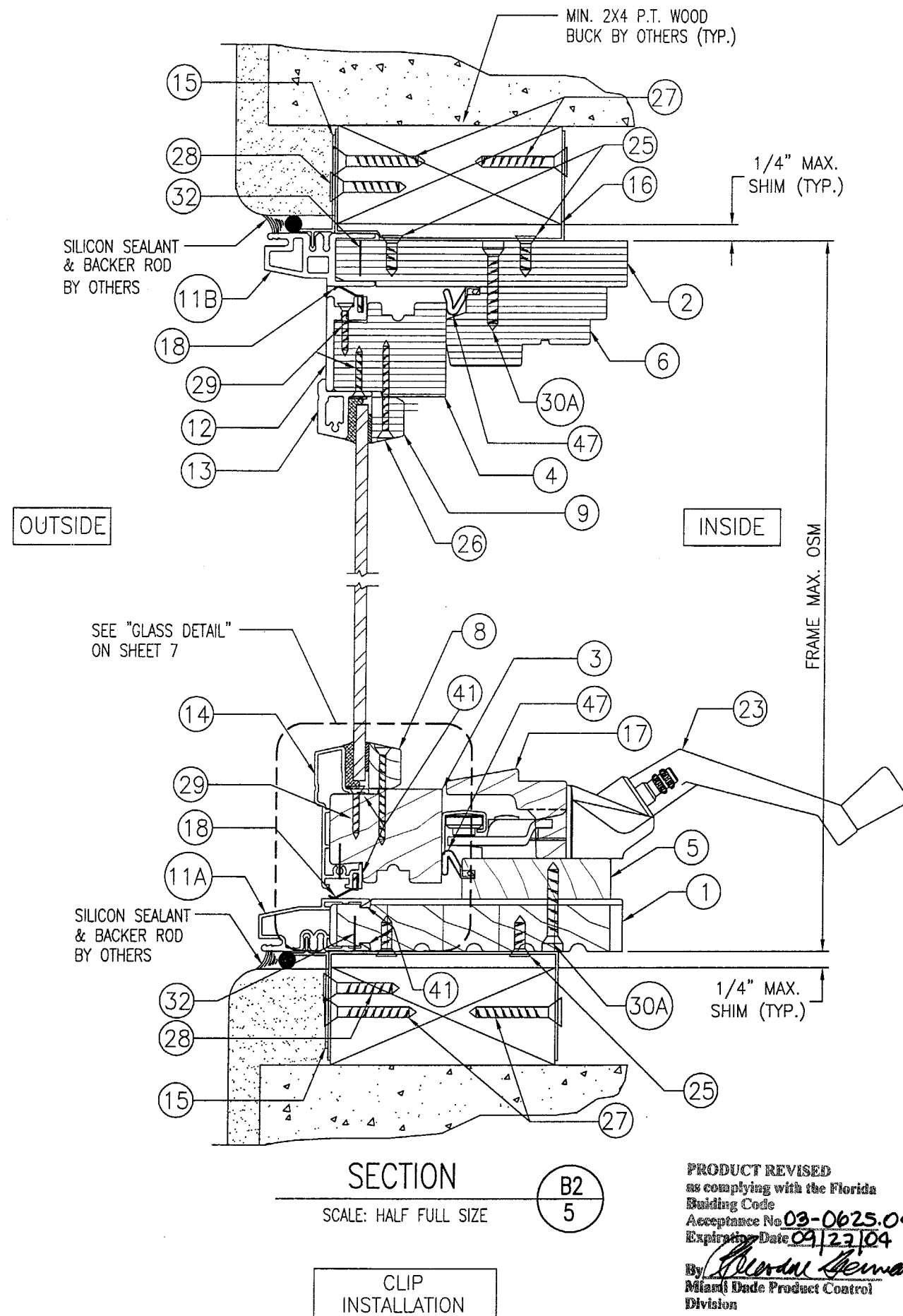
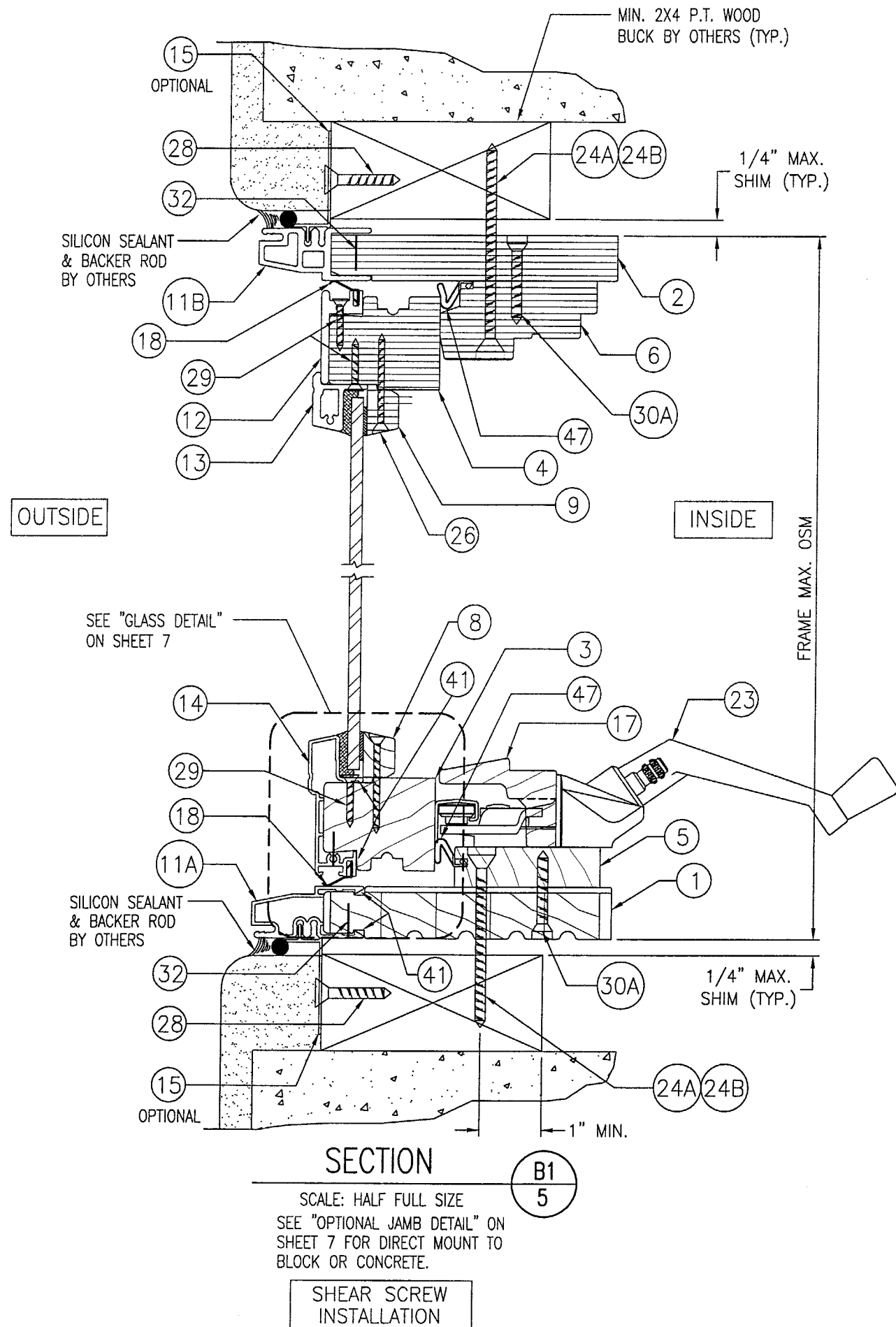
SCALE: HALF FULL SIZE

CLIP
INSTALLATION

A2
4

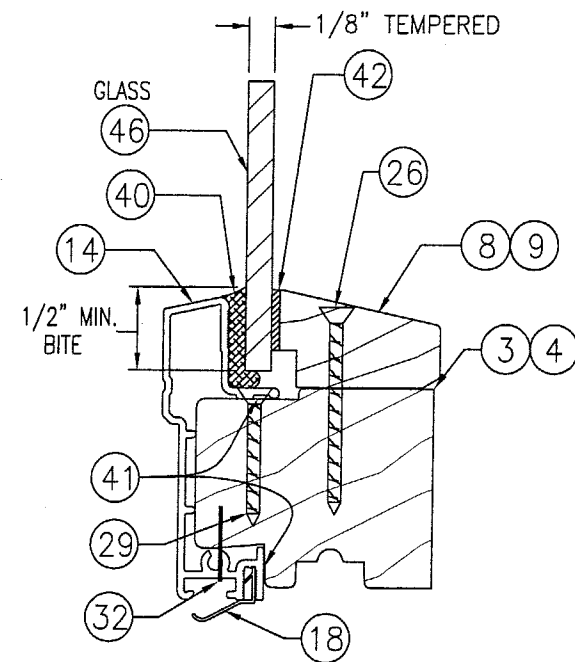
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 03-0625.09
Expiration Date 09/23/04
By *Warren W. Schaeffer*
Miami Dade Product Control
Division

DRAWING TITLE		DRAWN BY:		CHECKED BY:	
ALUMINUM CLAD WOOD OPERABLE CASEMENT NON-IMPACT WINDOWS		K.P.S.		W.W.S.	
CONSULTANTS		PLOT:		DATE:	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		1=2		05/13/03	
MANUFACTURER		NO.		REVISION DESCRIPTION	
KML WINDOWS, INC.		DATE		BY	
23 BUCHANAN COURT		NO.		REVISION DESCRIPTION	
LONDON, ONTARIO, CANADA N5Z4P9		DATE		BY	
(519) 681-7012		NO.		REVISION DESCRIPTION	
8895 N. MILITARY TRAIL, SUITE C-204		DATE		BY	
PALM BEACH GARDENS, FL 33410		NO.		REVISION DESCRIPTION	
PHONE: 561-775-4902 FAX: 561-775-4903		DATE		BY	
CERTIFICATION		NO.		REVISION DESCRIPTION	
JUN 18 2003		DATE		BY	
WARREN W. SCHAEFER, P.E.		NO.		REVISION DESCRIPTION	
P.E. NO. 44135		DATE		BY	
DRAWING NO.		NO.		REVISION DESCRIPTION	
1227B		DATE		BY	
SHEET NO.		NO.		REVISION DESCRIPTION	
4 OF 10		DATE		BY	

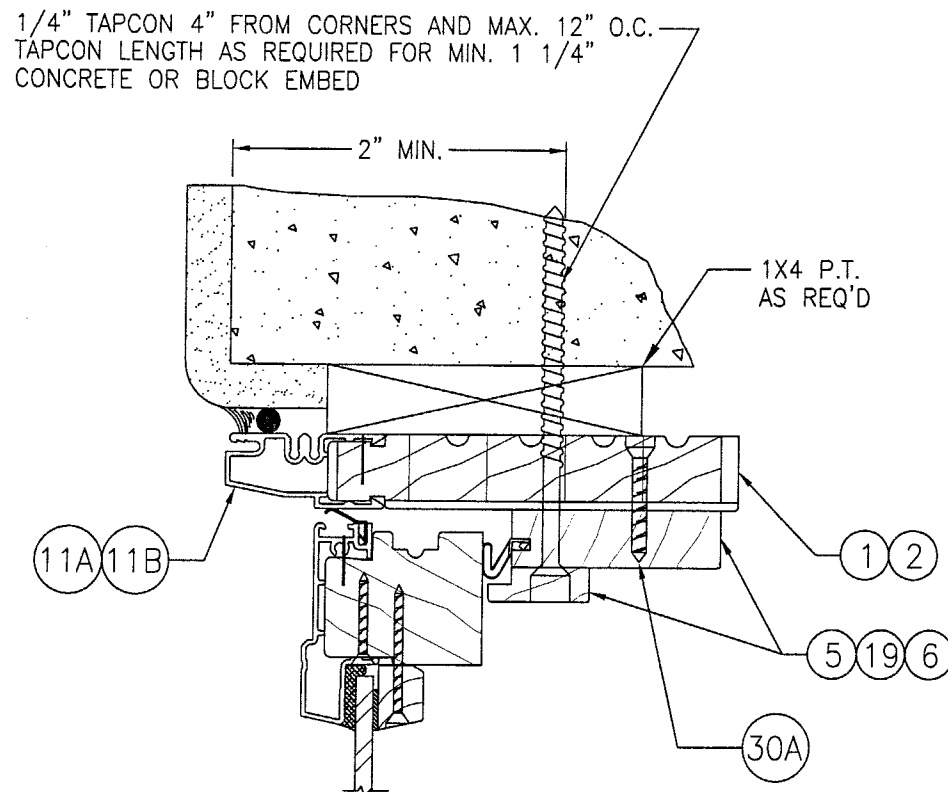


PRODUCT REVISED
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Building Code
Acceptance No. 03-0625.09
Expiration Date 09/23/04
By: *Michael Herman*
Miami Trade Product Control
Division

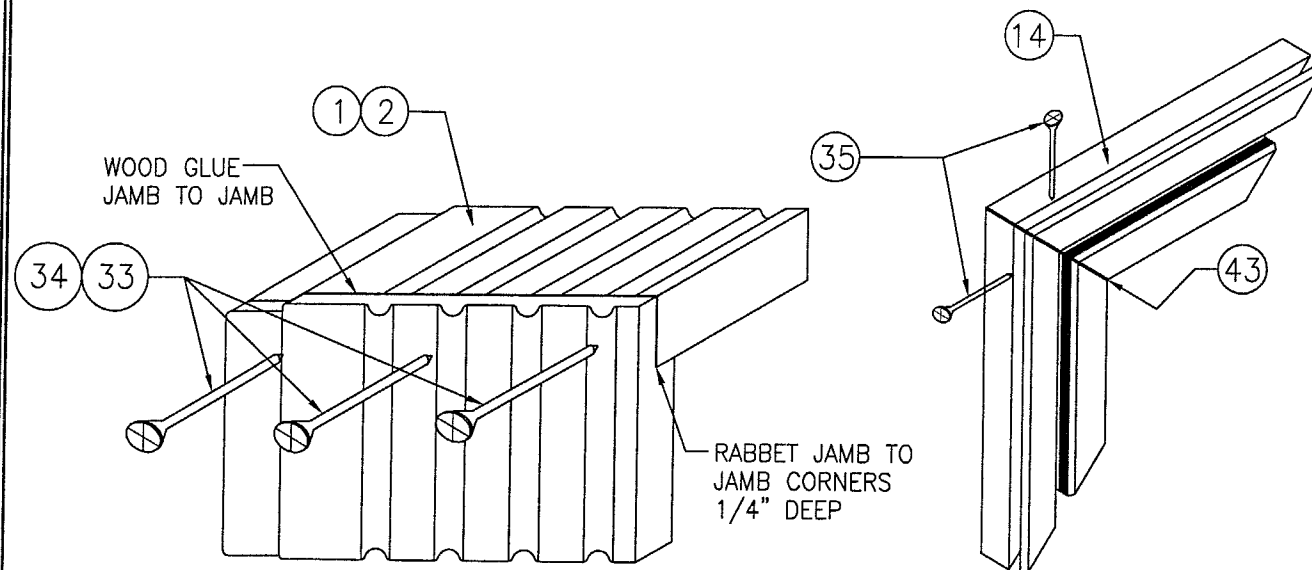
DRAWING TITLE		DRAWN BY: K.P.S.		CHECKED BY: W.W.S.	
ALUMINUM CLAD WOOD OPERABLE CASEMENT NON-IMPACT WINDOWS		PLOT: 1=2		DATE: 05/13/03	
CONSULTANTS		MANUFACTURER		NO.	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903		KML WINDOWS, INC. 23 BUCHANAN COURT LONDON, ONTARIO, CANADA N5Z4P9 (519) 681-7012		REVISION	
CERTIFICATION		DATE		BY	
JUN 18 2003					
WARREN W. SCHAEFER, P.E. P.E. NO. 44135					
DRAWING NO. 1227B		REV.			
SHEET NO. 5 OF 10					



TYPICAL GLASS & GLAZING DETAIL
SCALE: 3/4 FULL SIZE
1/8" TEMPERED GLASS



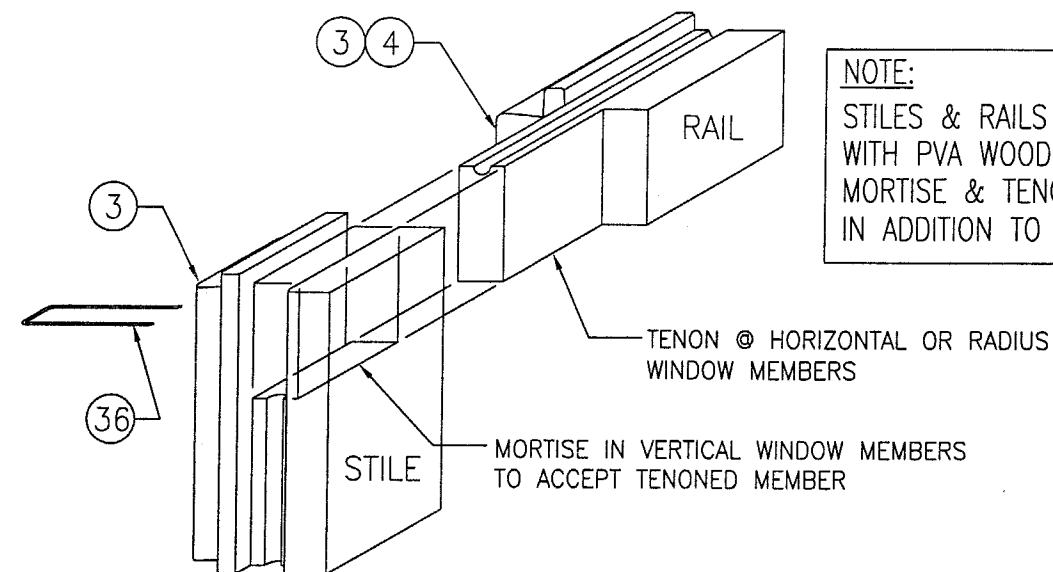
OPTIONAL JAMB DETAIL FOR DIRECT MOUNT TO CONCRETE OR BLOCK
(TYP. ALL UNITS)
SCALE: 1/2 FULL SIZE



JAMB TO JAMB DETAIL
SCALE: N.T.S.

CLAD TO CLAD DETAIL
SCALE: N.T.S.

JAMB CORNER DETAILS



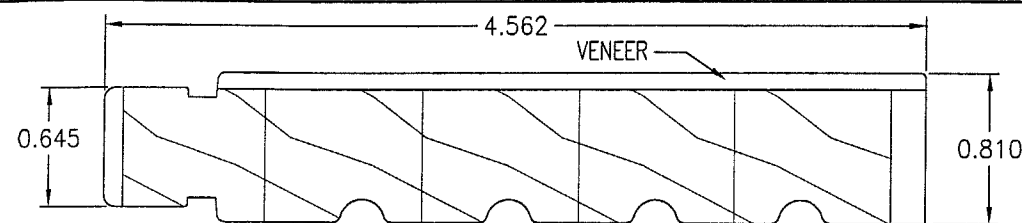
SASH STILE TO RAIL CORNER DETAIL
SCALE: N.T.S.

NOTE: CLAD CORNER IS MITERED & FASTENED WITH 1 NO. 6 X 1" SMS (26) INTO SPLINE & GASKETED WITH (31) (SIMILAR TO JAMB CLAD CORNERS)

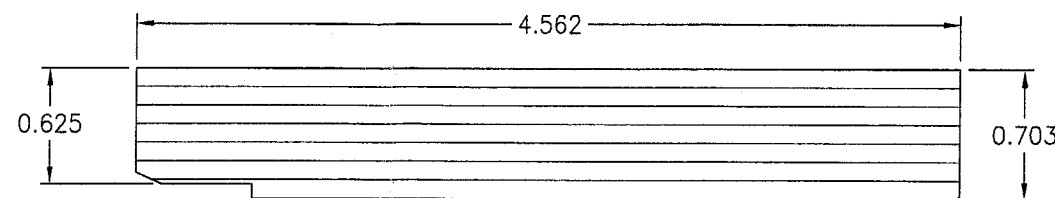
NOTE:
STILES & RAILS SECURED WITH PVA WOOD GLUE @ MORTISE & TENON JOINTS IN ADDITION TO BRAD NAILS

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Expiration Date 09/27/04
By: *Warren W. Schaefer*
Miami Date Product Control
Division

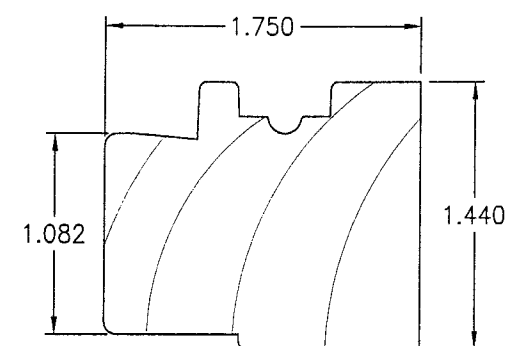
DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 05/13/03
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE ALUMINUM CLAD WOOD OPERABLE CASEMENT NON-IMPACT WINDOWS	
MANUFACTURER KML WINDOWS, INC. 23 BUCHANAN COURT LONDON, ONTARIO, CANADA N5Z4P9 (519) 681-7012	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	
CERTIFICATION JUN 18 2003	WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1227B	REV.
SHEET NO. 7 OF 10	



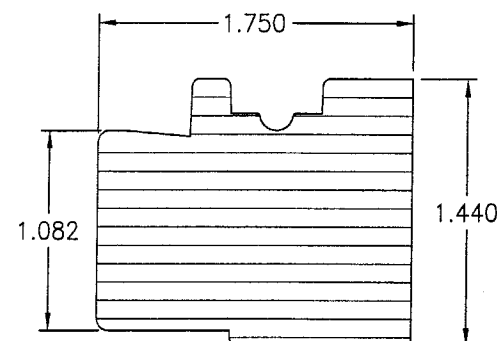
① **LINEAL WOOD FRAME JAMB**
PONDEROSA PINE LAMINATED IN 5 BLOCKS



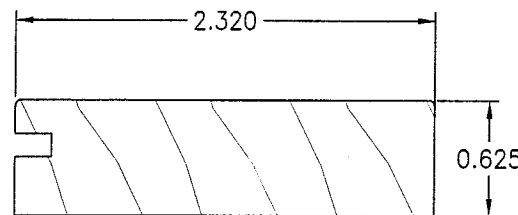
② **RADIAL WOOD FRAME JAMB**
(LAMINATED VENEER)



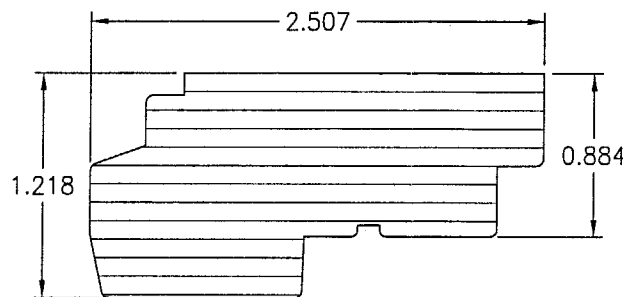
③ **LINEAL SASH**



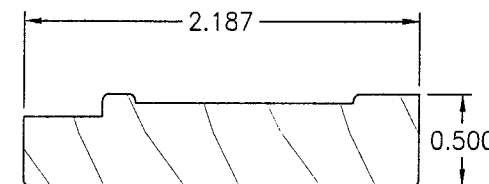
④ **RADIAL SASH**
(LAMINATED VENEER)



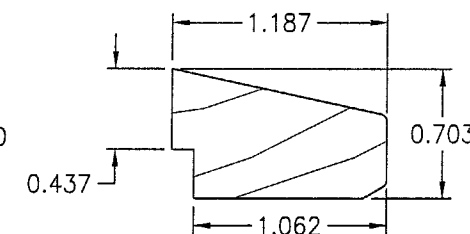
⑤ **WEATHERSEAL ADAPTER**



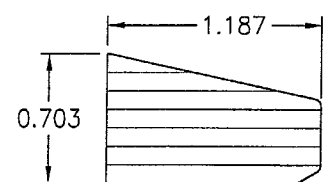
⑥ **RADIAL SASH STOP**
(LAMINATED VENEER)



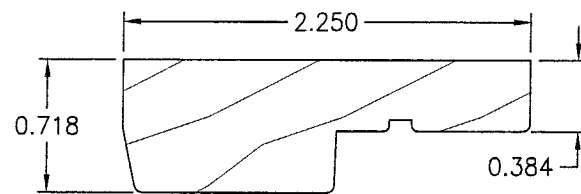
⑦ **LINEAL SASH STOP & W.S.A.**



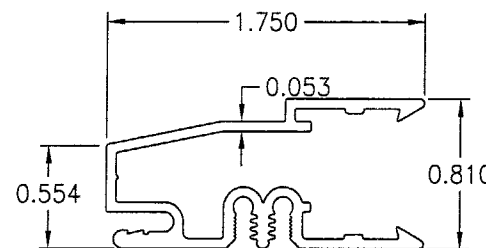
⑧ **LINEAL WOOD GLAZING STOP**



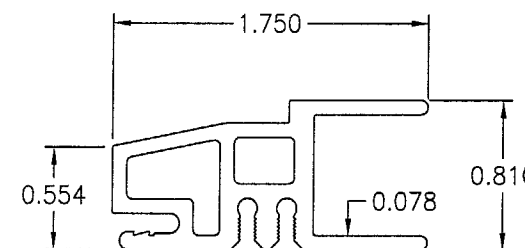
⑨ **RADIAL WOOD GLAZING STOP**
(LAMINATED VENEER)



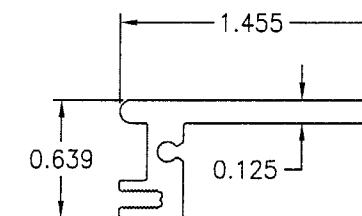
⑩ **LINEAL SASH STOP COVER**



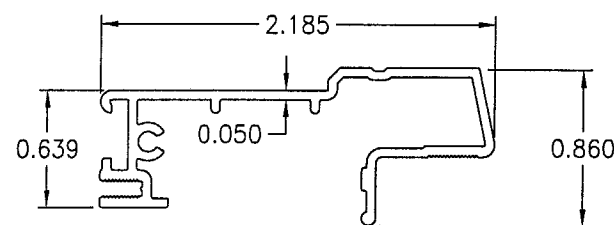
⑪A **LINEAL JAMB CLADDING**
(6063-T5 ALUMINUM)



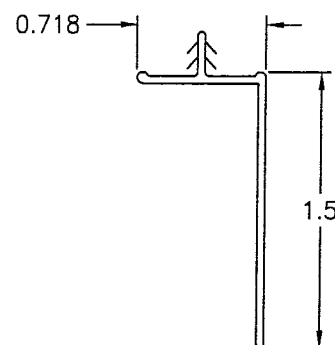
⑪B **RADIAL FRAME CLADDING**
(6063-T5 ALUMINUM)



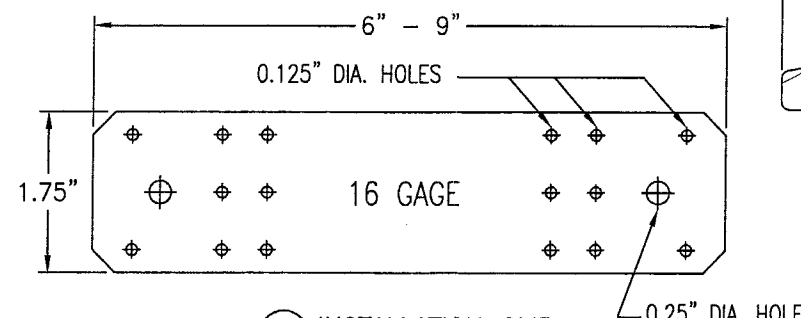
⑫ **RADIAL SASH CLADDING**
(6063-T5 ALUMINUM)



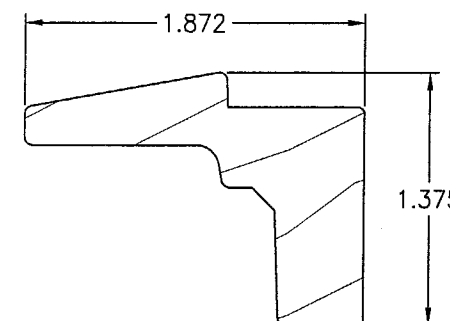
⑭ **LINEAL SASH CLADDING**
(6063-T5 ALUMINUM)



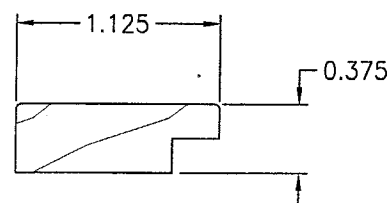
⑮ **NAILING FIN**
(VINYL)



⑯ **INSTALLATION CLIP**
(GALVANIZED STEEL)
Fy = 33 ksi MIN.



⑰ **OPERATOR COVER**



⑲ **LINEAL SCREEN STOP**

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 03-0625-09
Expiration Date 09/23/04
By: *Warren W. Schaeffer*
Miami Dade Product Control
Division

DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
PLOT: 1=1	DATE: 05/13/03
DATE	BY
REVISION DESCRIPTION	NO.
ALUMINUM CLAD WOOD OPERABLE CASEMENT NON-IMPACT WINDOWS	
MANUFACTURER KML WINDOWS, INC. 23 BUCHANAN COURT LONDON, ONTARIO, CANADA N5Z4P9 (519) 681-7012	
CONSULTANTS W. SCHAEFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	
CERTIFICATION JUN 18 2003 WARREN W. SCHAEFER, P.E. P.E. NO. 44133	
DRAWING NO. 1227B	REV.
SHEET NO. 8	OF 10

DESIGN LOAD CAPACITY (PSF) FOR NON-IMPACT WINDOWS							
WINDOW SIZE (OSM)		RECTANGULAR		SHAPED		NUMBER OF HINGES	NUMBER OF LATCH POINTS
WIDTH	HEIGHT	POS	NEG	POS	NEG		
20"	24"	65.0	99.1	65.0	87.5	2	2
24"		65.0	82.6	65.0	72.9	2	2
28"		65.0	70.8	62.5	62.5	2	2
32"		61.9	61.9	54.7	54.7	2	2
35"		56.6	56.6	50.0	50.0	2	2
20"	30"	65.0	99.1	65.0	87.5	2	2
24"		65.0	82.6	65.0	72.9	2	2
28"		65.0	70.8	62.5	62.5	2	2
32"		61.9	61.9	54.7	54.7	2	2
35"		56.6	56.6	50.0	50.0	2	2
20"	36"	65.0	99.1	65.0	87.5	2	2
24"		65.0	82.6	65.0	72.9	2	2
28"		65.0	70.8	62.5	62.5	2	2
32"		61.9	61.9	54.7	54.7	2	2
35"		56.6	56.6	50.0	50.0	2	2
20"	42"	65.0	99.1	65.0	87.5	2	3
24"		65.0	82.6	65.0	72.9	2	3
28"		65.0	70.8	62.5	62.5	2	3
32"		61.9	61.9	54.7	54.7	2	3
35"		56.6	56.6	50.0	50.0	2	3
20"	48"	65.0	99.1	65.0	87.5	2	3
24"		65.0	82.6	65.0	72.9	2	3
28"		65.0	70.8	62.5	62.5	2	3
32"		61.9	61.9	54.7	54.7	2	3
35"		56.6	56.6	50.0	50.0	2	3
20"	54"	65.0	96.2	65.0	85.0	3	3
24"		65.0	82.6	65.0	72.9	3	3
28"		65.0	70.8	62.5	62.5	3	3
32"		61.9	61.9	54.7	54.7	3	3
35"		56.6	56.6	50.0	50.0	3	3
20"	60"	65.0	94.1	65.0	83.1	3	4
24"		65.0	81.7	65.0	72.1	3	4
28"		65.0	70.8	62.5	62.5	3	4
32"		61.9	61.9	54.7	54.7	3	4
35"		56.6	56.6	50.0	50.0	3	4

DESIGN LOAD CAPACITY (PSF) FOR NON-IMPACT WINDOWS							
WINDOW SIZE (OSM)		RECTANGULAR		SHAPED		NUMBER OF HINGES	NUMBER OF LATCH POINTS
WIDTH	HEIGHT	POS	NEG	POS	NEG		
20"	66"	65.0	92.4	65.0	81.6	3	4
24"		65.0	79.9	65.0	70.5	3	4
28"		65.0	70.8	62.5	62.5	3	4
32"		61.9	61.9	54.7	54.7	3	4
35"		56.6	56.6	50.0	50.0	3	4
20"	72"	65.0	91.0	65.0	80.4	3	5
24"		65.0	78.4	65.0	69.2	3	5
28"		65.0	69.5	61.4	61.4	3	5
32"		61.9	61.9	54.7	54.7	3	5
35"		56.6	56.6	50.0	50.0	3	5
20"	78"	65.0	89.9	65.0	79.4	3	5
24"		65.0	77.2	65.0	68.2	3	5
28"		65.0	68.2	60.3	60.3	3	5
32"		61.7	61.7	54.5	54.5	3	5
35"		56.6	56.6	50.0	50.0	3	5
20"	84"	65.0	89.0	65.0	78.6	3	5
24"		65.0	76.2	65.0	67.3	3	5
28"		65.0	67.2	59.3	59.3	3	5
32"		60.6	60.6	53.5	53.5	3	5
35"		56.6	56.6	50.0	50.0	3	5

1. THE LOADS IN THESE TABLES ARE AS DETERMINED BY TESTING & COMPARATIVE ANALYSIS WITH THE CONTROLLING FACTOR BEING THE WORSE CASE OF: GLASS SIZE & AREA, UNIT AREA, NUMBER OF HINGES, NUMBER OF LOCKING POINTS, NUMBER OF SNUBBERS, OR FASTENER CAPABILITIES.
2. THE LOADS IN THESE TABLES MAY NOT BE INTERPOLATED.
3. FOR MULLED UNITS AND THERE ALLOWABLE LOADS, REFER TO SHEET 3 OF THIS DRAWING AND/OR MULLION DRAWING 1003E. NO INCREASE IN LOAD FOR JAMB TO JAMB UNREINFORCED MULLED UNITS IS ALLOWED OVER THAT SPECIFIED ON SHEET 3. IF WINDOW SIZE REQUIREMENTS & LOAD REQUIREMENTS DO NOT MEET THOSE SPECIFIED ON SHEET 3, A REINFORCED MULLION MUST BE USED IN ACCORDANCE WITH DRAWING 1003E.

Acceptance No 03-0625.09
Expiration Date 09/23/04

By Cleavie Gentry
Miami Dade Product Control
Division

JUN 18 2003

WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. 1227B	REV.
SHEET NO.	

SHEET NO.
9 OF 10

DRAWING TITLE
ALUMINUM CLAD WOOD OPERABLE CASEMENT NON-IMPACT WINDOWS

CONSULTANTS
**W. W. SCHAEFER ENGINEERING
& CONSULTING, P.A.**

8895 N. MILITARY TRAIL; SUITE C-204
PALM BEACH GARDENS, FL 33410
PHONE: 561-775-4902 FAX: 561-775-4903

MANUFACTURER

KML WINDOWS, INC.

23 BUCHANAN COURT
LONDON, ONTARIO, CANADA N5Z4P9
(519) 681-7012

DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
PLOT: 1=1	DATE: 05/13/03

[illegible]


MATERIAL LIST			
PART NO.	REF. NO.	DESCRIPTION	NOTES
PARTS & EXTRUSIONS			
1	PF1010	LINEAL JAMB	SEE NOTE 1 THIS SHEET.
2	PF1231	RADIAL JAMB	LAMINATED VENEER
3	PF1007	LINEAL SASH	SEE NOTE 1 THIS SHEET.
4	PF1015	RADIAL SASH	LAMINATED VENEER
5	PF1024	WEATHERSEAL ADAPTER	SEE NOTE 1 THIS SHEET.
6	PF1005	RADIAL SASH STOP	LAMINATED VENEER
7	PF1351	LINEAL SASH STOP W.S.A.	SEE NOTE 1 THIS SHEET.
8	PF1008	LINEAL GLAZING STOP	SEE NOTE 1
9	PF1008	RADIAL GLAZING STOP	LAMINATED VENEER
10	PF1485	LINEAL SASH STOP\COVER	SEE NOTE 1 THIS SHEET.
11A	PF1001	LINEAL JAMB CLADDING	ALUMINUM 6063-T5
11B	PF1002	RADIAL JAMB CLADDING	ALUMINUM 6063-T5
12	PF1018	RADIAL SASH CLADDING	ALUMINUM 6063-T5
13	PF1017	RADIAL GLASS STOP	ALUMINUM 6063-T5
14	PF1074	LINEAL SASH CLADDING	ALUMINUM 6063-T5
15	PF1214 OR PF1326	VINYL NAILING FINIS	OPTIONAL WITH SHEAR SCREW INSTALLATION
16	SK1031	GALV. 16 GA. STEEL INSTALLATION CLIP (Fy = 33 KSI MIN.)	GALVANIZED STEEL, INC. MAX. 4" FROM CORNERS & 12" O.C.
17	PF1009	OPERATOR COVER	SEE NOTE 1 THIS SHEET.
18	PF1026	0.415" X 0.489" RAINSKIRT	SCHLEGEL: EXTRUDED FLEXIBLE COPOLYMER
19	PF1012	LINEAL SCREEN STOP	SEE NOTE 1 THIS SHEET.
20	-	OPEN	
21	-	CONCEALED MULTI-POINT LOCK	MIRAGE 16 SERIES MULTI-POINT SYSTEM
22	SK1002	KML S.S. BUTT HINGE	FOR USE WITH ALL WINDOW SHAPES
23	-	SINGLE ARM OPERATOR	TRUTH HARDWARE ENTRYGUARD OR EQUAL
FASTENERS			
24A	-	#10 SMS JAMB SHEAR SCREW	WITHIN 4" FROM CORNERS & MAX. 12" O.C.
24B	-	#10 SMS JAMB SHEAR SCREW	1 ADDITIONAL EA. SIDE OF MULLION ENDS
25	-	#8 x 5/8" PAN HEAD SMS SCREW	2 PER CLIP INTO JAMB
26	-	#6 X 1 5/8" SMS SCREW	WITHIN 3" FROM CORNERS & MAX. 8" O.C.
27	-	#8 x 1 1/4" SMS SCREW	2 PER CLIP INTO BUCK (1 EA. SIDE OF BUCK)
28	-	S.S. #8 x 1 1/4" SMS SCREW OR 1 5/8" DRYWALL SCREWS	WITHIN 4" FROM ENDS & MAX. 10 1/2" O.C. WITH FIN
29	-	#6 x 3/4" SMS SCREW	WITHIN 3" FROM CORNERS & 8" O.C.

MATERIAL LIST			
PART NO.	REF. NO.	DESCRIPTION	NOTES
30A	—	#8 x 1 1/4" SMS SCREW	4" FROM CORNERS & 8" O.C. (AT RADIAL SASH STOPS)
30B	—	#8 x 1" SMS SCREW	4" FROM CORNERS & 8" O.C. (AT LINEAL SASH STOPS)
30C	—	F-14 X 1 5/8" BRAD NAILS	2 @ 4" FROM CORNERS & 8" O.C. @ SIDES
31A	—	#8 X 1" SMS SCREW	5 PER HINGE LEAF INTO SASH (S/S OR BRASS)
31B	—	10-24 FH MACH SCREW W/T-NUT	2 PER HINGE LEAF INTO JAMB (S/S OR BRASS)
31C	—	#10 x 3" SMS SCREW	2 PER HINGE LEAF INTO BUCK (S/S OR BRASS)
32	—	3/8" LONG STAPLE	WITHIN 3" FROM CORNERS & MAX. 8" O.C
33	—	#8 x 2" SMS SCREW	3 @ EACH RECTANGULAR JAMB CORNER
34	—	#8 x 1 1/2" SMS SCREW	3 @ EACH RADIUS JAMB CORNER
35	—	#6 x 3/4" SMS SCREW	2 @ EACH CLAD CORNER INTO CLAD SPLINES
36	—	16 GA. x 1 1/2" LONG STAPLE	1 @ EXTERIOR SIDE OF SASH STILE & RAIL MORTISE & TENON CONNECTION
37	—	JAMB JACK III	TRUTH HARDWARE NO. 21150: @ HINGE JAMB 1 WITH EA. JAMB JACK SCREW
38	—	JAMB JACK III SCREW	TRUTH HARDWARE NO. 21171: @ HINGE JAMB 3.15" LONG; 1 PER WINDOW @ SHAPED UNITS
SEALANTS			
40	—	DOW 995 SILICONE	FOR 1/2" GLAZING BITE
41	—	STRUCTURAL SILICONE ADHESIVE	DOW 1199 CONTINUOUS CLADDING TO JAMB
OTHER			
42	—	NORTON NORGLAZE .0625" X .437" GLAZING TAPE	POLYOLEFIN FOAM W/ ACRYLIC ADHESIVE
43	—	TREMCO 440 BUTYL TAPE GASKET	TRIM OFF AT EDGES (TYP. AT JAMB & SASH CLAD CORNERS)
46	—	1/8" THICK TEMPERED GLASS	
47	PF1013	FRAME WEATHERSEAL	MONSANTO "SANTOPRENE": FOAMED ELASTOMERIC

1 ALL WOOD USED WITH TESTED UNITS IS MINIMUM GRADE 2 PONDEROSA PINE (JAMBS ARE 5-BLOCK LAMINATED STAGE BLOCK). ALTERNATE WOOD SPECIES ACCEPTABLE WITH THIS PRODUCT ARE THE FOLLOWING MINIMUM GRADE 2 WOODS: (JAMBS MUST BE 5-BLOCK LAMINATED):

1. MAHOGANY
2. OAK
3. CHERRY
4. CYPRUS
5. DOUGLAS FIR
6. MAPLE
7. TEAK

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 03-0625-09
Expiration Date 09/23/04
By [Signature]
Miami Dade Product Control
Division

DRAWING NO. 1227B	SHEET NO. 10 OF 10	REV.	CERTIFICATION JUN 18 2003  WARREN W. SCHAEFFER, P.E. P.E. NO. 14178	DRAWING TITLE ALUMINUM CLAD WOOD OPERABLE CASEMENT NON-IMPACT WINDOWS	DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
				CONSULTANTS W. W. SCHAEFFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-7775-4902 FAX: 561-7775-4903	MANUFACTURER KML WINDOWS, INC. 23 BUCHANAN COURT LONDON, ONTARIO, CANADA N5Z4P9 (519) 681-7012	PLOT: 1=1
NO. REVISION DESCRIPTION BY DATE						